

TECH CENTER

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#13  
PIPERAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/381,903DATE: 08/27/2001  
TIME: 12:27:48Input Set : A:\Merck203.app  
Output Set: N:\CRF3\08272001\I381903.raw

3 <110> APPLICANT: KAHLERT, HELGA  
4 STUWE, HANS-THOMAS  
5 FIEBIG, HELMUT  
6 CROMWELL, OLIVER  
7 BECKER, WOLF-MEINHARD  
8 BUFE, ALBRECHT  
9 SCHRAMM, GABRIELE  
10 JAGER, LOTHAR  
11 MULLER, WOLF-DIETER  
13 <120> TITLE OF INVENTION: GRAMINAE POLLEN ALLERGEN MUTANTS FOR SPECIFIC  
14 IMMUNOTHERAPY, AND PRODUCTION AND USE OF THE SAME  
16 <130> FILE REFERENCE: MERCK-2034  
18 <140> CURRENT APPLICATION NUMBER: 09/381,903  
19 <141> CURRENT FILING DATE: 2000-04-17  
21 <150> PRIOR APPLICATION NUMBER: PCT/EP98/01507  
22 <151> PRIOR FILING DATE: 1998-03-16  
24 <150> PRIOR APPLICATION NUMBER: DE 197 13 001.4  
25 <151> PRIOR FILING DATE: 1997-03-27  
27 <160> NUMBER OF SEQ ID NOS: 99  
29 <170> SOFTWARE: PatentIn Ver. 2.1  
31 <210> SEQ ID NO: 1  
32 <211> LENGTH: 12  
33 <212> TYPE: PRT  
34 <213> ORGANISM: Artificial Sequence  
36 <220> FEATURE:  
37 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓  
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42 1 5 10  
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51 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓  
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61 <212> TYPE: PRT  
62 <213> ORGANISM: Artificial Sequence  
64 <220> FEATURE:  
65 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓  
66 peptide

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68 <400> SEQUENCE: 3
69 Pro Ala Thr Pro Ala Ala Gly Ala Ala Gly
70 1 5 10
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75 <212> TYPE: PRT
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
80 peptide ✓
82 <400> SEQUENCE: 4
83 Pro Ala Ala Gly Ala Ala Ala Gly Lys Ala Thr
84 1 5 10
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 12
89 <212> TYPE: PRT
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
94 peptide ✓
96 <400> SEQUENCE: 5
97 Ala Gly Ala Ala Gly Lys Ala Thr Thr Glu Glu
98 1 5 10
101 <210> SEQ ID NO: 6
102 <211> LENGTH: 12
103 <212> TYPE: PRT
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
108 peptide ✓
110 <400> SEQUENCE: 6
111 Ala Ala Gly Lys Ala Thr Thr Glu Glu Gln Lys Leu
112 1 5 10
115 <210> SEQ ID NO: 7
116 <211> LENGTH: 12
117 <212> TYPE: PRT
118 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
122 peptide ✓
124 <400> SEQUENCE: 7
125 Lys Ala Thr Thr Glu Glu Gln Lys Leu Ile Glu Asp
126 1 5 10
129 <210> SEQ ID NO: 8
130 <211> LENGTH: 12
131 <212> TYPE: PRT
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134 <220> FEATURE:
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136      peptide
138 <400> SEQUENCE: 8
139 Thr Glu Glu Gln Lys Leu Ile Glu Asp Ile Asn Val
140   1           5           10
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144 <211> LENGTH: 12
145 <212> TYPE: PRT
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148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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153 Gln Lys Leu Ile Glu Asp Ile Asn Val Gly Phe Lys
154   1           5           10
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158 <211> LENGTH: 12
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162 <220> FEATURE:
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166 <400> SEQUENCE: 10
167 Ile Glu Asp Ile Asn Val Gly Phe Lys Ala Ala Val
168   1           5           10
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172 <211> LENGTH: 12
173 <212> TYPE: PRT
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
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178      peptide
180 <400> SEQUENCE: 11
181 Ile Asn Val Gly Phe Lys Ala Ala Val Ala Ala Ala
182   1           5           10
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187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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196   1           5           10
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200 <211> LENGTH: 12
201 <212> TYPE: PRT
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:

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238   1             5             10
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243 <212> TYPE: PRT
244 <213> ORGANISM: Artificial Sequence
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247 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
248     peptide
250 <400> SEQUENCE: 16
251 Pro Ala Ala Asp Lys Phe Lys Thr Phe Glu Ala Ala
252   1             5             10
255 <210> SEQ ID NO: 17
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257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
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264 <400> SEQUENCE: 17
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266   1             5             10
269 <210> SEQ ID NO: 18
270 <211> LENGTH: 12
271 <212> TYPE: PRT
272 <213> ORGANISM: Artificial Sequence

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274 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
276     peptide
278 <400> SEQUENCE: 18
279 Lys Thr Phe Glu Ala Phe Thr Ser Ser Ser Lys
280   1             5             10
283 <210> SEQ ID NO: 19
284 <211> LENGTH: 12
285 <212> TYPE: PRT
286 <213> ORGANISM: Artificial Sequence
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289 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
290     peptide
292 <400> SEQUENCE: 19
293 Glu Ala Ala Phe Thr Ser Ser Ser Lys Ala Ala
294   1             5             10
297 <210> SEQ ID NO: 20
298 <211> LENGTH: 12
299 <212> TYPE: PRT
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
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306 <400> SEQUENCE: 20
307 Phe Thr Ser Ser Ser Lys Ala Ala Ala Lys Ala
308   1             5             10
311 <210> SEQ ID NO: 21
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318     peptide
320 <400> SEQUENCE: 21
321 Ser Ser Lys Ala Ala Ala Lys Ala Pro Gly Leu
322   1             5             10
325 <210> SEQ ID NO: 22
326 <211> LENGTH: 12
327 <212> TYPE: PRT
328 <213> ORGANISM: Artificial Sequence
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332     peptide
334 <400> SEQUENCE: 22
335 Ala Ala Ala Lys Ala Pro Gly Leu Val Pro Lys
336   1             5             10
339 <210> SEQ ID NO: 23
340 <211> LENGTH: 12
341 <212> TYPE: PRT

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/381,903

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